

AMENDMENTS TO THE CLAIMS:

Listing of claims:

This listing of claims replaces all prior versions and listings of claims in the application.

1. (Currently Amended) A method for fabricating a semiconductor device comprising the steps of:

forming a gate electrode on a semiconductor substrate with a gate insulation film formed therebetween;

patterning the conductor layer with a resist film as a mask to form a gate electrode;

implanting a dopant in the semiconductor substrate with the gate electrode and the resist film as a mask to form a doped region in the semiconductor substrate;

removing the resist film with an atmosphere;

forming a chemical oxide film on the doped region, which prevents sufficient to prevent the dopant implanted in the doped region from diffusing outside the semiconductor substrate; and

performing thermal processing for activating the dopant implanted in the doped region,

the step of removing the resist film also forms the chemical oxide film, in that the

atmosphere for removing the resist film also oxidizes a surface of the doped region to form the
chemical oxide film.

2. (Canceled)

3. (Original) A method for fabricating a semiconductor device according to claim 1, wherein in the step of forming the chemical oxide film, the chemical oxide film of a 1.4 nm-thickness or above is formed.

4. (Canceled)

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5. (Original) A method for fabricating a semiconductor device according to claim 1, wherein in the step of the performing thermal processing, the thermal processing is performed in an atmosphere containing no oxygen.

6. (Canceled)

7. (Original) A method for fabricating a semiconductor device according to claim 3, wherein in the step of the performing thermal processing, the thermal processing is performed in an atmosphere containing no oxygen.

8. (Currently Amended) A method for fabricating a semiconductor device according to claim 1, wherein ~~in the step of forming the chemical oxide film, the doped region is oxidized by the atmosphere is~~ at least any one of plasmas containing oxygen, oxygen radicals and a chemical liquid.

9. (Canceled)

10. (Currently Amended) A method for fabricating a semiconductor device according to claim 3, wherein ~~in the step of forming the chemical oxide film, the doped region is oxidized by the atmosphere is~~ at least any one of plasmas containing oxygen, oxygen radicals and a chemical liquid.

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11. (Currently Amended) A method for fabricating a semiconductor device according to claim 5, wherein ~~in the step of forming the chemical oxide film, the doped region is oxidized by the atmosphere is~~ at least any one of plasmas containing oxygen, oxygen radicals and a chemical liquid.

12. (Original) A method for fabricating a semiconductor device according to claim 8, wherein the chemical liquid is sulfuric acid/hydrogen peroxide mixture, ammonia/hydrogen peroxide mixture, hydrochloric acid/hydrogen peroxide/water mixture, an aqueous solution of ozone or nitric acid.

13-14. (Canceled)

15. (Original) A method for fabricating a semiconductor device according to claim 1, wherein in the step of performing the thermal processing, the thermal processing is performed by RTA.

16-17. (Canceled)